

SEQUENCE LISTING

<110> Taylor, J. Michael
 Kehrli, Jr., Marcus
 Lee, Eun-Kyung
 Mwangi, Simon

<120> BOVINE TUMOR NECROSIS FACTOR RECEPTOR-1
 AND METHODS OF USE

<130> 08411-018001

<140> 09/513,007

<141> 2000-02-25

<150> 60/122,156

<151> 1999-02-26

<160> 8

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 2440

<212> DNA

<213> Bos taurus

<220>

<221> CDS

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gggtttgagg	tcctccggat	tgggctgtgt	ccccgcccc	gtctcaaccc	tccactcccc	180
gacccgaggc	ccgggctcca	ctgggcatac	gcgaggaccg	tggttctgtc	actgtcgcgg	240
gccgccactg	ccccagccct	gatgggggat	tgagaggcca	cagctggccg	gac atg	296
				Met		
				1		

ggc ctc ccc acc gtg cct ggc ctg ctg ctg cca ctg gtg ctt cca gct	344
Gly Leu Pro Thr Val Pro Gly Leu Leu Leu Pro Leu Val Leu Pro Ala	
5 10 15	

ctg ttg gca gat gtg tac ccc gca ggg gtt cag ggg ctg gtc cct cac	392
Leu Leu Ala Asp Val Tyr Pro Ala Gly Val Gln Gly Leu Val Pro His	
20 25 30	

ccc ggg gac ctg gag aag aga gag agt ccc tgt ccc caa gga aaa tat	440
Pro Gly Asp Leu Glu Lys Arg Glu Ser Pro Cys Pro Gln Gly Lys Tyr	
35 40 45	

aac cac ccg caa aat agc acc att tgc tgc acc aag tgc cac aaa ggt	488
Asn His Pro Gln Asn Ser Thr Ile Cys Cys Thr Lys Cys His Lys Gly	
50 55 60 65	

acc tat ctg tac aat gac tgt ccg ggt cca ggg cga gac acg gac tgc	536
Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Arg Asp Thr Asp Cys	
70 75 80	

agg	gtg	tgt	gcc	cct	ggc	acc	tac	act	gcc	ttg	gag	aac	cat	ctc	aga	584
Arg	Val	Cys	Ala	Pro	Gly	Thr	Tyr	Thr	Ala	Leu	Glu	Asn	His	Leu	Arg	
			85					90					95			
cga	tgc	ctg	agc	tgc	tcc	agg	tgc	cgg	gac	gaa	atg	ttc	cag	gtg	gag	632
Arg	Cys	Leu	Ser	Cys	Ser	Arg	Cys	Arg	Asp	Glu	Met	Phe	Gln	Val	Glu	
		100					105					110				
att	tcg	cct	tgt	gta	gtg	gac	cgg	gac	act	gtg	tgc	ggc	tgc	agg	aag	680
Ile	Ser	Pro	Cys	Val	Val	Asp	Arg	Asp	Thr	Val	Cys	Gly	Cys	Arg	Lys	
	115					120					125					
aac	cag	tac	cgg	gaa	tac	tgg	ggc	gaa	act	ggc	ttc	cgg	tgt	ctg	aac	728
Asn	Gln	Tyr	Arg	Glu	Tyr	Trp	Gly	Glu	Thr	Gly	Phe	Arg	Cys	Leu	Asn	
130					135					140					145	
tgc	agc	ctc	tgt	ccc	aat	ggc	aca	gtg	aat	atc	ccc	tgc	cag	gag	aga	776
Cys	Ser	Leu	Cys	Pro	Asn	Gly	Thr	Val	Asn	Ile	Pro	Cys	Gln	Glu	Arg	
				150					155						160	
cag	gac	acc	atc	tgc	cac	tgc	cat	atg	ggc	ttc	ttt	ctt	aaa	ggc	gcc	824
Gln	Asp	Thr	Ile	Cys	His	Cys	His	Met	Gly	Phe	Phe	Leu	Lys	Gly	Ala	
			165					170						175		
aag	tgc	atc	tcc	tgt	cat	gat	tgt	aag	aac	aag	gag	tgc	gag	aag	tta	872
Lys	Cys	Ile	Ser	Cys	His	Asp	Cys	Lys	Asn	Lys	Glu	Cys	Glu	Lys	Leu	
		180					185					190				
tgt	cca	acc	cga	cct	tca	act	ggc	aaa	gac	tct	cag	gac	cca	ggc	act	920
Cys	Pro	Thr	Arg	Pro	Ser	Thr	Gly	Lys	Asp	Ser	Gln	Asp	Pro	Gly	Thr	
	195					200					205					
aca	gta	cta	tta	ccc	ctg	gtg	att	gtc	ttc	ggg	ctt	tgc	ctg	gca	tcc	968
Thr	Val	Leu	Leu	Pro	Leu	Val	Ile	Val	Phe	Gly	Leu	Cys	Leu	Ala	Ser	
210					215					220					225	
ttc	gcc	tct	gtc	gtc	tta	gca	tgt	cgc	tac	cag	cgg	tgg	aag	ccc	aag	1016
Phe	Ala	Ser	Val	Val	Leu	Ala	Cys	Arg	Tyr	Gln	Arg	Trp	Lys	Pro	Lys	
				230					235					240		
ctc	tac	tcc	atc	att	tgc	ggg	cag	tcg	act	ctg	gta	aaa	gag	ggg	gag	1064
Leu	Tyr	Ser	Ile	Ile	Cys	Gly	Gln	Ser	Thr	Leu	Val	Lys	Glu	Gly	Glu	
			245					250					255			
cca	gaa	ctc	ctg	gtc	ccg	gcc	cca	ggc	ttc	aac	ccc	acc	acc	acc	atc	1112
Pro	Glu	Leu	Leu	Val	Pro	Ala	Pro	Gly	Phe	Asn	Pro	Thr	Thr	Thr	Ile	
		260					265					270				
tgc	ttc	agc	tcc	acc	cca	agt	tcc	agt	cct	gtc	tcc	att	ccc	cct	tac	1160
Cys	Phe	Ser	Ser	Thr	Pro	Ser	Ser	Ser	Pro	Val	Ser	Ile	Pro	Pro	Tyr	
	275					280					285					
atc	tcc	tgt	gac	cgg	tcc	aac	ttc	gga	gcc	gtc	gca	tct	ccc	tcc	agc	1208
Ile	Ser	Cys	Asp	Arg	Ser	Asn	Phe	Gly	Ala	Val	Ala	Ser	Pro	Ser	Ser	
290					295					300					305	
gag	acg	gcc	ccg	ccc	cat	cta	aag	gct	ggc	ccc	atc	ctc	ccg	ggg	cct	1256
Glu	Thr	Ala	Pro	Pro	His	Leu	Lys	Ala	Gly	Pro	Ile	Leu	Pro	Gly	Pro	
				310					315					320		
ccg	gcc	tcc	acc	cac	ctc	tgt	acc	ccg	ggg	cct	ccg	gcc	tcc	acc	cac	1304

Pro Ala Ser Thr His Leu Cys Thr Pro Gly Pro Pro Ala Ser Thr His
 325 330 335

ctc tgt acc ccg ggg cct ccg gcc tcc acc cac ctc tgc acc cca gtt 1352
 Leu Cys Thr Pro Gly Pro Pro Ala Ser Thr His Leu Cys Thr Pro Val
 340 345 350

cag aag tgg gaa gcc agc gcc ccc agc gcc ccc gat cag ctc gcg gat 1400
 Gln Lys Trp Glu Ala Ser Ala Pro Ser Ala Pro Asp Gln Leu Ala Asp
 355 360 365

gcc gac ccc gcg acc ctg tac gcg gtg gtg gac ggc gtg ccc ccg tcg 1448
 Ala Asp Pro Ala Thr Leu Tyr Ala Val Val Asp Gly Val Pro Pro Ser
 370 375 380 385

cgc tgg aag gag ttg gtg cgg cgg ctg gga ctg agc gag cac gag atc 1496
 Arg Trp Lys Glu Leu Val Arg Arg Leu Gly Leu Ser Glu His Glu Ile
 390 395 400

gag cgg ctg gag ctg gag aac ggg cgc cac ctg cgc gag gcg cag tac 1544
 Glu Arg Leu Glu Leu Glu Asn Gly Arg His Leu Arg Glu Ala Gln Tyr
 405 410 415

agc atg ctg gcg gcc tgg cgg cgg cgc acg ccg cgc cgc gag gcc acg 1592
 Ser Met Leu Ala Ala Trp Arg Arg Arg Thr Pro Arg Arg Glu Ala Thr
 420 425 430

ctg gag ctg ctg ggc cgc gtg ctc agg gac atg gac ctg ctg ggt tgc 1640
 Leu Glu Leu Leu Gly Arg Val Leu Arg Asp Met Asp Leu Leu Gly Cys
 435 440 445

ctg gaa aac ata gag gag gcg ctg ggt ggc gcc gcc cgc ctc gcg tcc 1688
 Leu Glu Asn Ile Glu Glu Ala Leu Gly Gly Ala Ala Arg Leu Ala Ser
 450 455 460 465

gag ccc cgc ctt ctc tgg tgaagccccg cccctccgac tgcgggcctc 1736
 Glu Pro Arg Leu Leu Trp
 470

cccgccctgc agacggctgc ttccttctg tgccaggcag cccggaagga tctgcgagat 1796
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 <211> 471
 <212> PRT
 <213> Bos taurus

<400> 2
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 35 40 45
 Tyr Asn His Pro Gln Asn Ser Thr Ile Cys Cys Thr Lys Cys His Lys
 50 55 60
 Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Arg Asp Thr Asp
 65 70 75 80
 Cys Arg Val Cys Ala Pro Gly Thr Tyr Thr Ala Leu Glu Asn His Leu
 85 90 95
 Arg Arg Cys Leu Ser Cys Ser Arg Cys Arg Asp Glu Met Phe Gln Val
 100 105 110
 Glu Ile Ser Pro Cys Val Val Asp Arg Asp Thr Val Cys Gly Cys Arg
 115 120 125
 Lys Asn Gln Tyr Arg Glu Tyr Trp Gly Glu Thr Gly Phe Arg Cys Leu
 130 135 140
 Asn Cys Ser Leu Cys Pro Asn Gly Thr Val Asn Ile Pro Cys Gln Glu
 145 150 155 160
 Arg Gln Asp Thr Ile Cys His Cys His Met Gly Phe Phe Leu Lys Gly
 165 170 175
 Ala Lys Cys Ile Ser Cys His Asp Cys Lys Asn Lys Glu Cys Glu Lys
 180 185 190
 Leu Cys Pro Thr Arg Pro Ser Thr Gly Lys Asp Ser Gln Asp Pro Gly
 195 200 205
 Thr Thr Val Leu Leu Pro Leu Val Ile Val Phe Gly Leu Cys Leu Ala
 210 215 220
 Ser Phe Ala Ser Val Val Leu Ala Cys Arg Tyr Gln Arg Trp Lys Pro
 225 230 235 240
 Lys Leu Tyr Ser Ile Ile Cys Gly Gln Ser Thr Leu Val Lys Glu Gly
 245 250 255
 Glu Pro Glu Leu Leu Val Pro Ala Pro Gly Phe Asn Pro Thr Thr Thr
 260 265 270
 Ile Cys Phe Ser Ser Thr Pro Ser Ser Ser Pro Val Ser Ile Pro Pro
 275 280 285
 Tyr Ile Ser Cys Asp Arg Ser Asn Phe Gly Ala Val Ala Ser Pro Ser
 290 295 300
 Ser Glu Thr Ala Pro Pro His Leu Lys Ala Gly Pro Ile Leu Pro Gly
 305 310 315 320
 Pro Pro Ala Ser Thr His Leu Cys Thr Pro Gly Pro Pro Ala Ser Thr
 325 330 335
 His Leu Cys Thr Pro Gly Pro Pro Ala Ser Thr His Leu Cys Thr Pro
 340 345 350
 Val Gln Lys Trp Glu Ala Ser Ala Pro Ser Ala Pro Asp Gln Leu Ala
 355 360 365
 Asp Ala Asp Pro Ala Thr Leu Tyr Ala Val Val Asp Gly Val Pro Pro
 370 375 380
 Ser Arg Trp Lys Glu Leu Val Arg Arg Leu Gly Leu Ser Glu His Glu
 385 390 395 400
 Ile Glu Arg Leu Glu Leu Glu Asn Gly Arg His Leu Arg Glu Ala Gln
 405 410 415
 Tyr Ser Met Leu Ala Ala Trp Arg Arg Arg Thr Pro Arg Arg Glu Ala
 420 425 430
 Thr Leu Glu Leu Leu Gly Arg Val Leu Arg Asp Met Asp Leu Leu Gly
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 Cys Leu Glu Asn Ile Glu Glu Ala Leu Gly Gly Ala Ala Arg Leu Ala
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 Ser Glu Pro Arg Leu Leu Trp
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<212> DNA

<213> Bos taurus

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Gln Gly Lys Tyr Asn His Pro Gln Asn Ser Thr Ile Cys Cys Thr Lys	
20 25 30	
tgc cac aaa ggt acc tat ctg tac aat gac tgt ccg ggt cca ggg cga	144
Cys His Lys Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Arg	
35 40 45	
gac acg gac tgc agg gtg tgt gcc cct ggc acc tac act gcc ttg gag	192
Asp Thr Asp Cys Arg Val Cys Ala Pro Gly Thr Tyr Thr Ala Leu Glu	
50 55 60	
aac cat ctc aga cga tgc ctg agc tgc tcc agg tgc cgg gac gaa atg	240
Asn His Leu Arg Arg Cys Leu Ser Cys Ser Arg Cys Arg Asp Glu Met	
65 70 75 80	
ttc cag gtg gag att tcg cct tgt gta gtg gac cgg gac act gtg tgc	288
Phe Gln Val Glu Ile Ser Pro Cys Val Val Asp Arg Asp Thr Val Cys	
85 90 95	
ggc tgc agg aag aac cag tac ccg gaa tac tgg ggt gaa act ggc ttc	336
Gly Cys Arg Lys Asn Gln Tyr Arg Glu Tyr Trp Gly Glu Thr Gly Phe	
100 105 110	
cgg tgt ctg aac tgc agc ctc tgt ccc aat ggc aca gtg aat atc ccc	384
Arg Cys Leu Asn Cys Ser Leu Cys Pro Asn Gly Thr Val Asn Ile Pro	
115 120 125	
tgc cag gag aga cag gac acc atc tgc cac tgc cat atg ggc ttc ttt	432
Cys Gln Glu Arg Gln Asp Thr Ile Cys His Cys His Met Gly Phe Phe	
130 135 140	
ctt aaa ggc gcc aag tgc atc tcc tgt cat gat tgt aag aac aag gag	480
Leu Lys Gly Ala Lys Cys Ile Ser Cys His Asp Cys Lys Asn Lys Glu	
145 150 155 160	
tgc gag aag tta tgt cca acc cga cct tca act ggt aaa gac tct cag	528
Cys Glu Lys Leu Cys Pro Thr Arg Pro Ser Thr Gly Lys Asp Ser Gln	
165 170 175	
gac cca ggc act aca	543
Asp Pro Gly Thr Thr	
180	

<210> 4

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<212> PRT

<213> Bos taurus

<400> 4

Leu Val Pro His Pro Gly Asp Leu Glu Lys Arg Glu Ser Pro Cys Pro
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 Gln Gly Lys Tyr Asn His Pro Gln Asn Ser Thr Ile Cys Cys Thr Lys
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 Cys His Lys Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Arg
 35 40 45
 Asp Thr Asp Cys Arg Val Cys Ala Pro Gly Thr Tyr Thr Ala Leu Glu
 50 55 60
 Asn His Leu Arg Arg Cys Leu Ser Cys Ser Arg Cys Arg Asp Glu Met
 65 70 75 80
 Phe Gln Val Glu Ile Ser Pro Cys Val Val Asp Arg Asp Thr Val Cys
 85 90 95
 Gly Cys Arg Lys Asn Gln Tyr Arg Glu Tyr Trp Gly Glu Thr Gly Phe
 100 105 110
 Arg Cys Leu Asn Cys Ser Leu Cys Pro Asn Gly Thr Val Asn Ile Pro
 115 120 125
 Cys Gln Glu Arg Gln Asp Thr Ile Cys His Cys His Met Gly Phe Phe
 130 135 140
 Leu Lys Gly Ala Lys Cys Ile Ser Cys His Asp Cys Lys Asn Lys Glu
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 Asp Pro Gly Thr Thr
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<213> Artificial Sequence

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<223> Oligonucleotide for PCR

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20

<210> 6

<211> 19

<212> DNA

<213> Artificial Sequence

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<223> Oligonucleotide for PCR

<400> 6

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19

<210> 7

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide for PCR

<400> 7

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45

<210> 8

<211> 39

<212> DNA

<213> Artificial sequence

<220>

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gctctagagc ttatgtagtg cctgggtcct gagagtctt